

# Early Diagnosis of G.I cancer

Presentation By  
Dr. Alankar Kumar Gupta

# Introduction

- India - 80% cancer is diagnosed in late stage.
- In US/ Europe - > 60% cases diagnosed early.
- We treat patients as an individual – not the burden of disease.
- No effective screening programme.

# Introduction

- Early diagnosis a **challenge** as well as **opportunity**
- Requires widespread use of **simple tests**
- High level of suspicion
- Chances for successful treatment / cure
- Recognizing possible **warning signs** of cancer
- **Screening** program

# Signs and symptoms of colorectal cancer

- **Change** in bowel habits, such as diarrhea, constipation, that lasts for more than a few days
- A feeling of **incomplete evacuation**
- **Rectal bleeding**, dark stools, or blood in the stool – not all haemorrhoids bleed.
- Cramping or abdominal (belly) pain
- **Weakness** and fatigue
- Unintended **weight loss**

# Risk Factors

- Age - > 50 yrs
- Personal history of colorectal **polyps** or colorectal cancer
- Personal history of **inflammatory bowel disease**
- Family history of colorectal cancer
- Inherited syndromes – FAP / HNPCC
- Type 2 diabetes
- Lifestyle-related factors – **Obesity, Smoking , Heavy alcohol use , Physical inactivity**

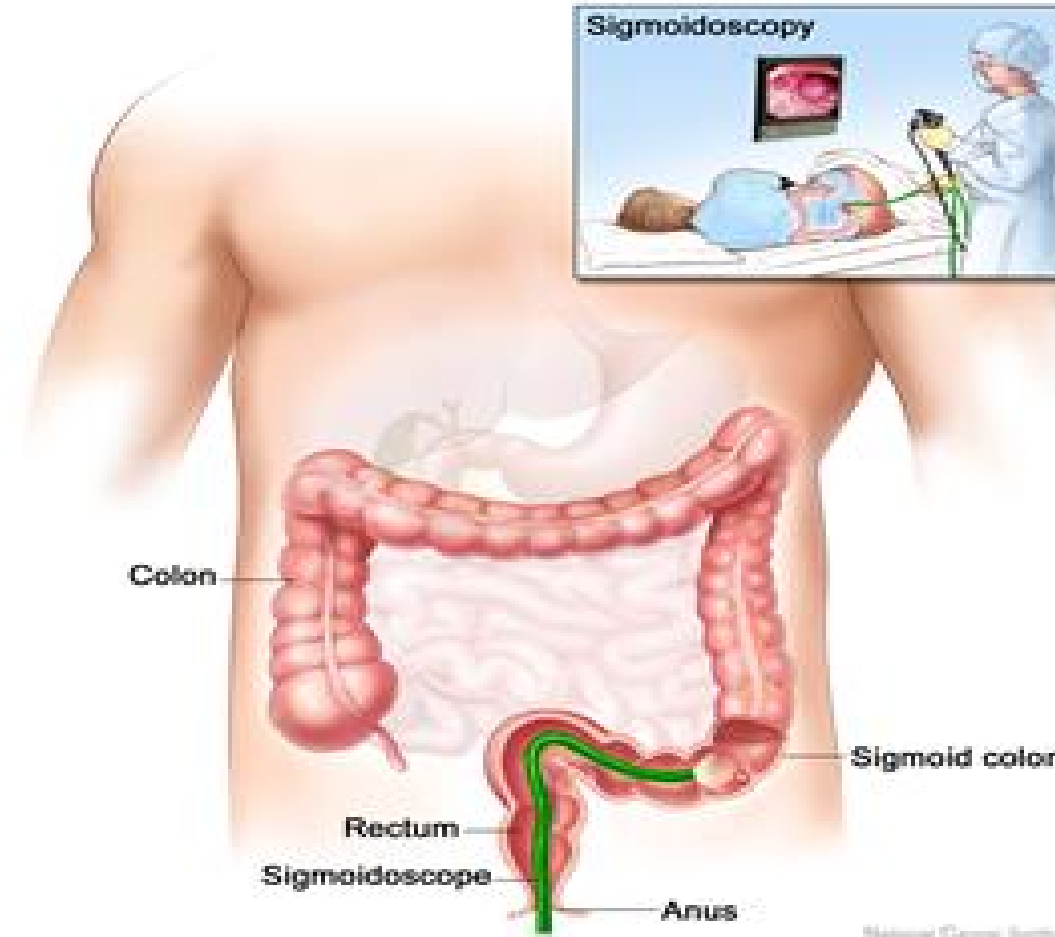
# Screening tests

- Tests that can find both colorectal polyps and cancer
  - Flexible sigmoidoscopy
  - Colonoscopy
  - Double-contrast barium enema
  - CT colonography (virtual colonoscopy)
- Tests that mainly find cancer
  - Fecal occult blood test (FOBT)
  - Fecal immunochemical test (FIT)

# Sigmoidoscope



# Flexible sigmoidoscopy

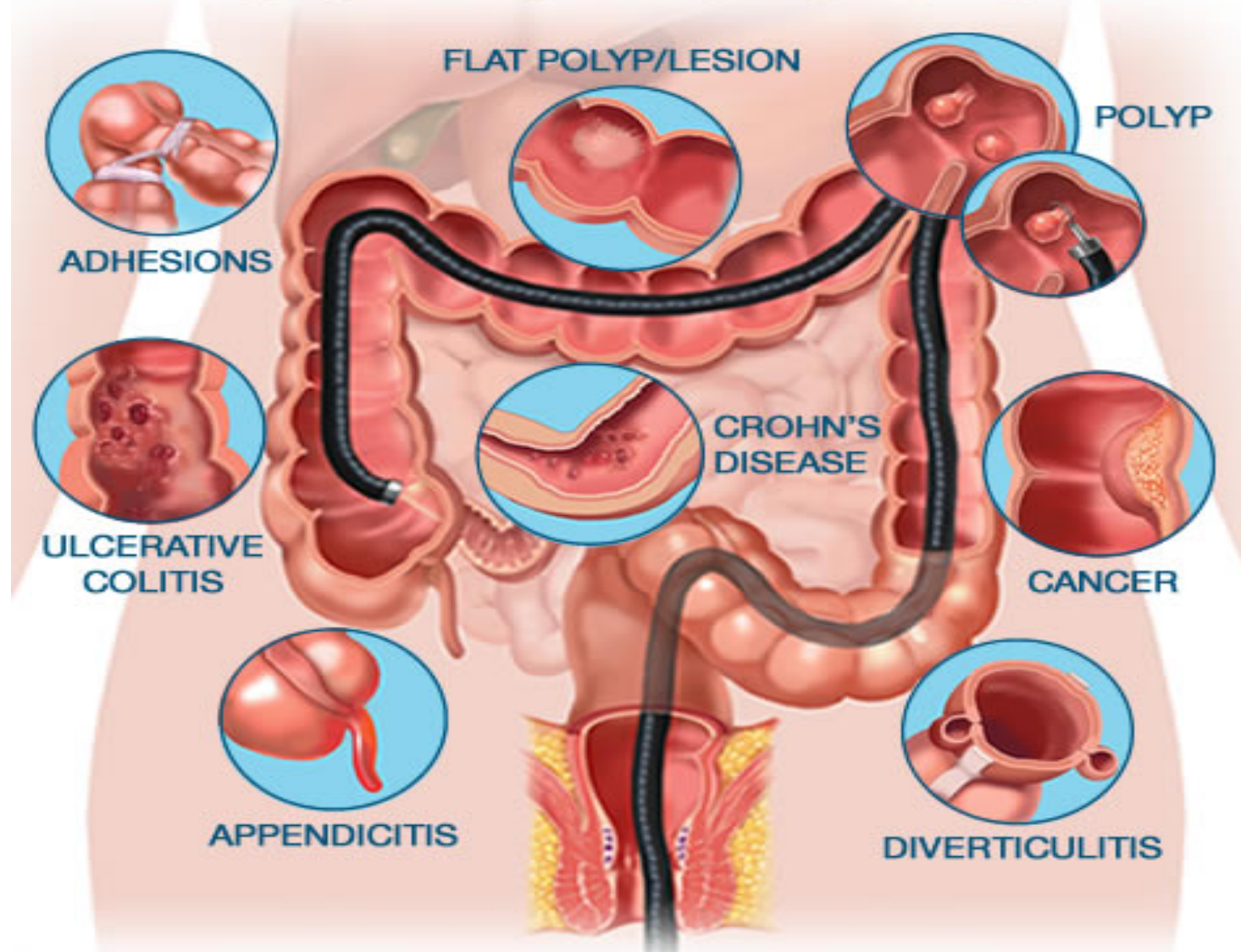




# Advantage

- Fairly quick and safe
- Usually doesn't require full bowel preparation
- Sedation usually not used
- Does not require a specialist
- Done every 5 years

# The COLONOSCOPY



- Can usually view entire colon
- Can biopsy and remove polyps
- Done every 10 years
- Can diagnose other diseases

# Double-contrast barium enema (DCBE)



- Can usually view entire colon
- Relatively safe
- Done every 5 years
- No sedation needed

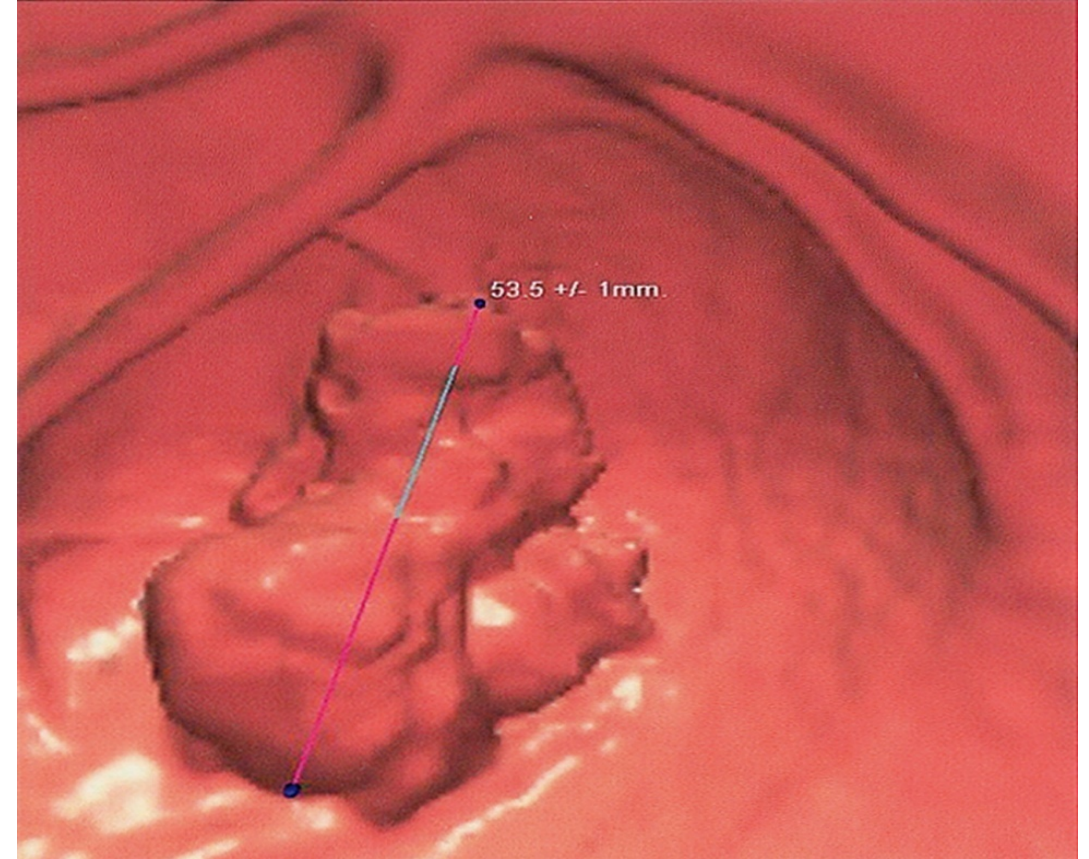
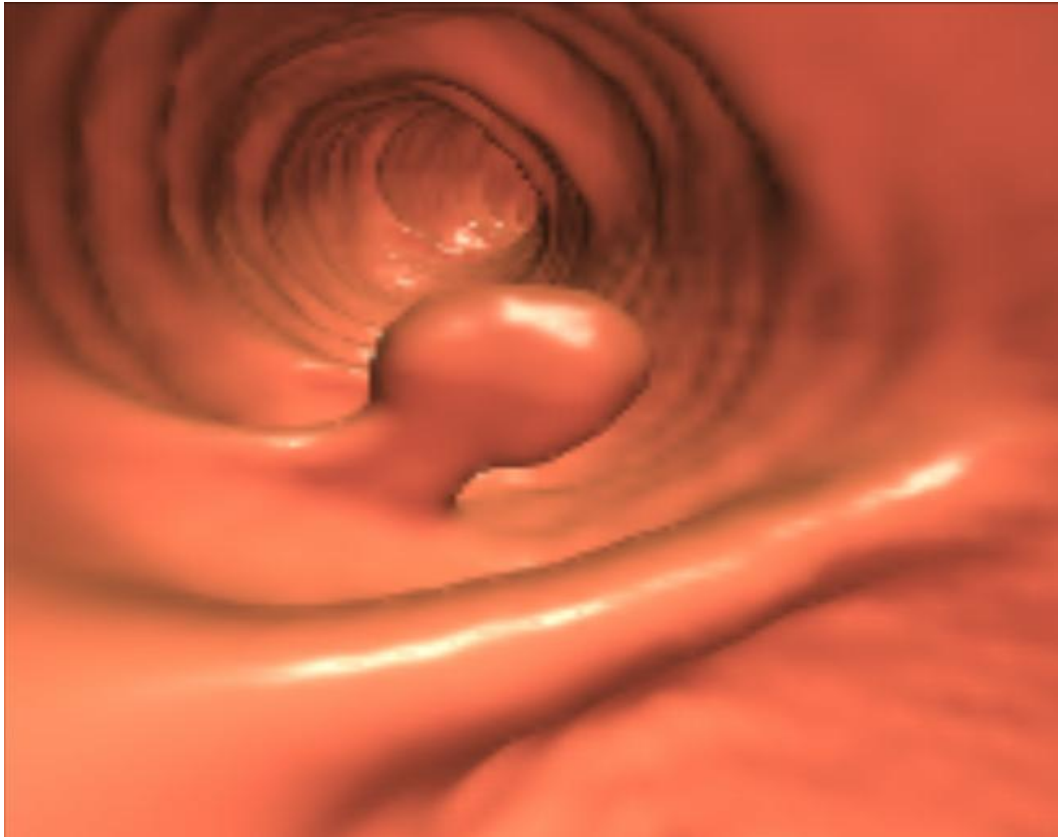
- Can miss small polyps
- Full bowel preparation needed
- Some false positive test results
- Cannot remove polyps during testing
- Colonoscopy will be needed if abnormal

# Fecal occult blood test (FOBT)

- No direct risk to the colon
- No bowel preparation
- Sampling done at home
- Inexpensive
- May miss many polyps and some cancers
- May produce false-positive test results
- May have pre-test dietary limitations
- Should be done every year



# CT colonography (virtual colonoscopy)



# CT colonography (virtual colonoscopy)

- Fairly quick and safe
- Can usually view entire colon
- Done every 5 years
- No sedation needed
- Can miss small polyps
- Full bowel preparation needed
- Some false positive test results
- Cannot remove polyps during testing
- Colonoscopy will be needed if abnormal
- Still fairly new - may be insurance issues



# Gastric Cancer

- Diagnosis is often **delayed** because symptoms may not occur in the early stages of the disease
- patients may **self-treat** symptoms
- Mass screening programs successful in Japan but not US.

# Risk Factors

- Family history of gastric cancer
- *Helicobacter pylori* infection
- Gastric polyp larger than 2 cm
- Long standing Inflammation (chronic atrophic gastritis)
- pernicious anemia
- Smoking

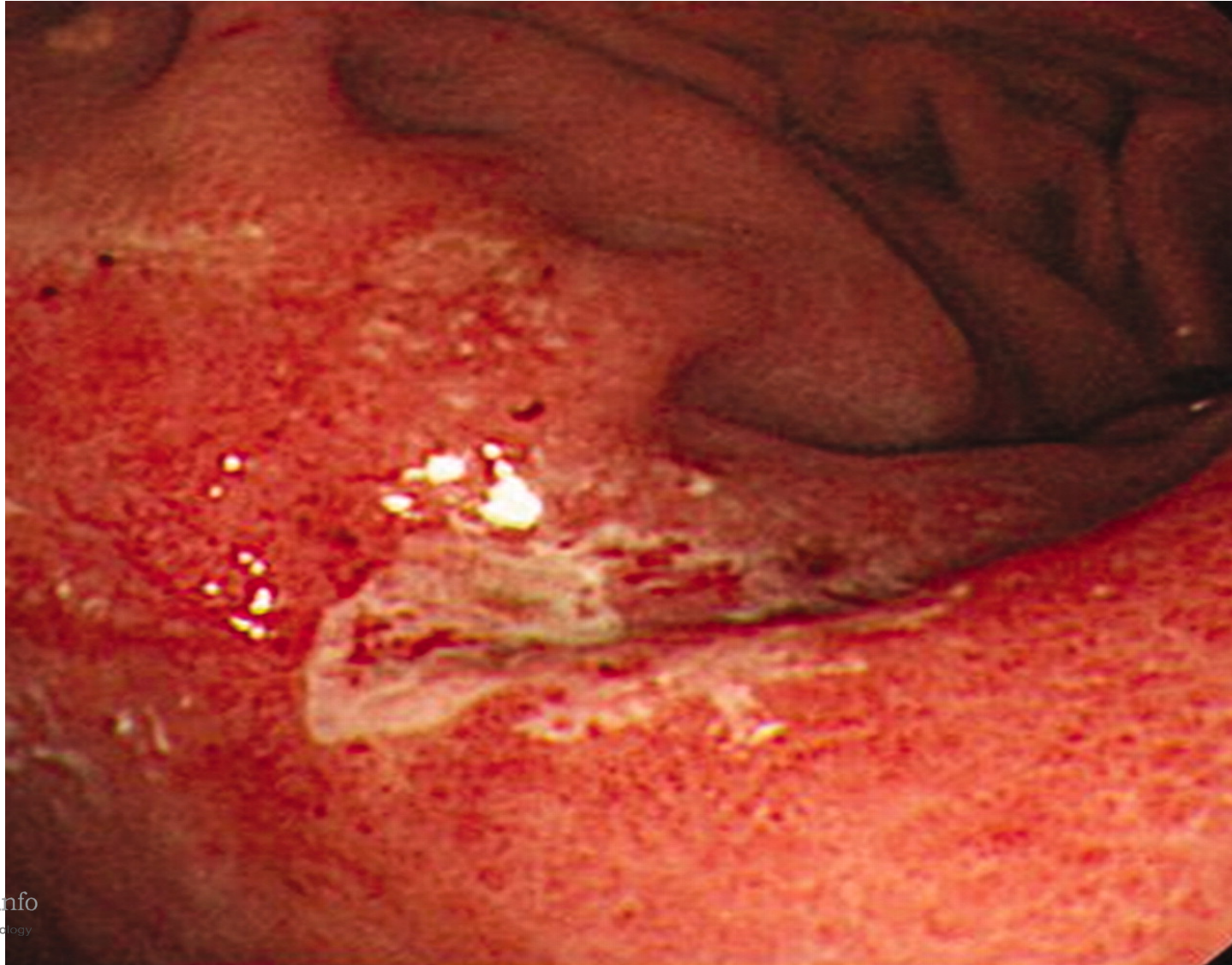
# Symptoms

- Abdominal **fullness or pain**, which may occur after eat a small meal
- Dark stools
- Difficulty swallowing, which becomes worse over time
- Excessive belching
- General decline in health
- Loss of appetite
- Nausea
- Vomiting, which may contain blood
- Weakness or fatigue
- Weight loss

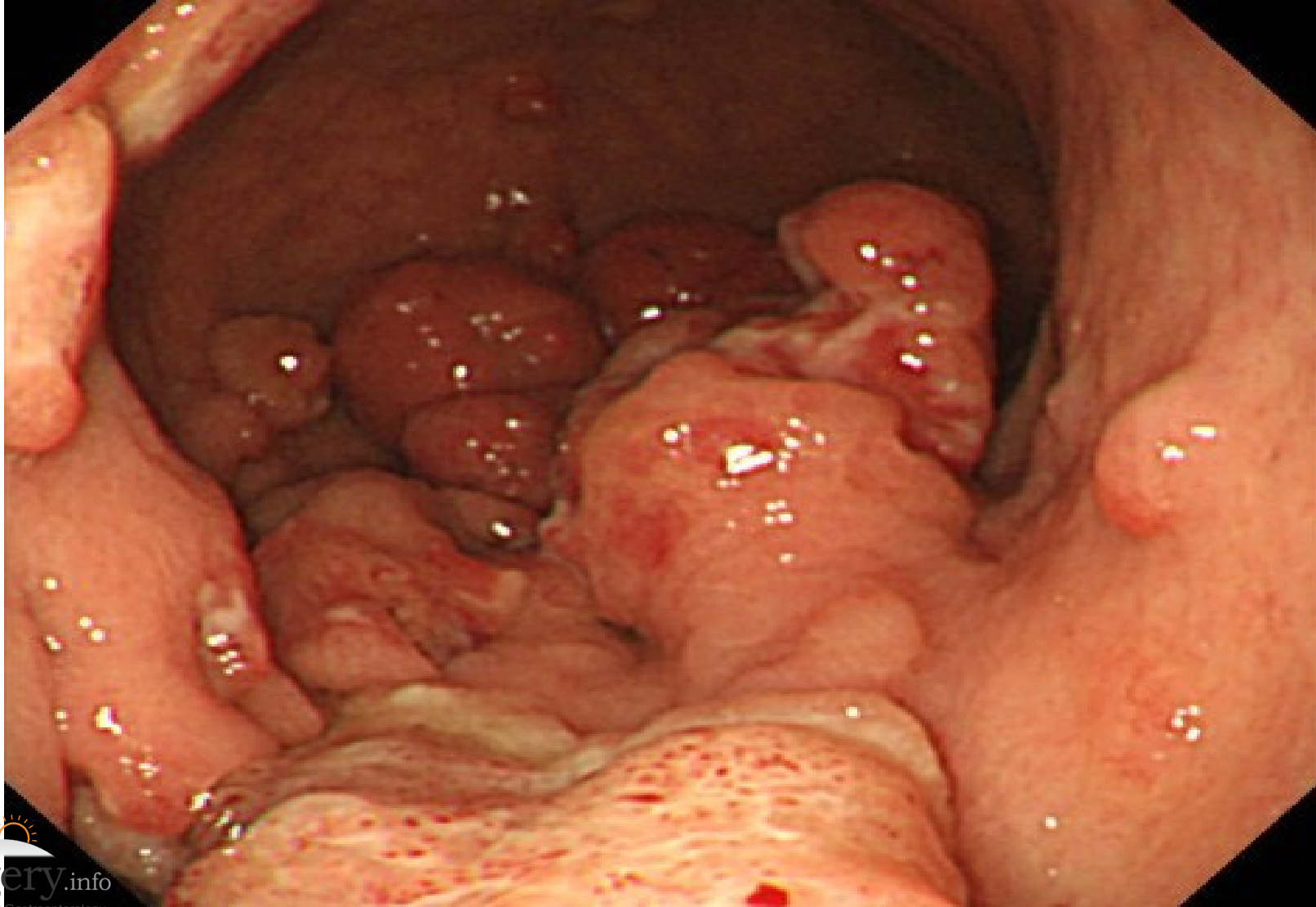
# Investigations

- [Complete blood count](#) (CBC) to check for [anemia](#)
- [Esophagogastroduodenoscopy](#) (EGD) with [biopsy](#)
- [Stool test](#) for occult blood

# Gastric ulcers



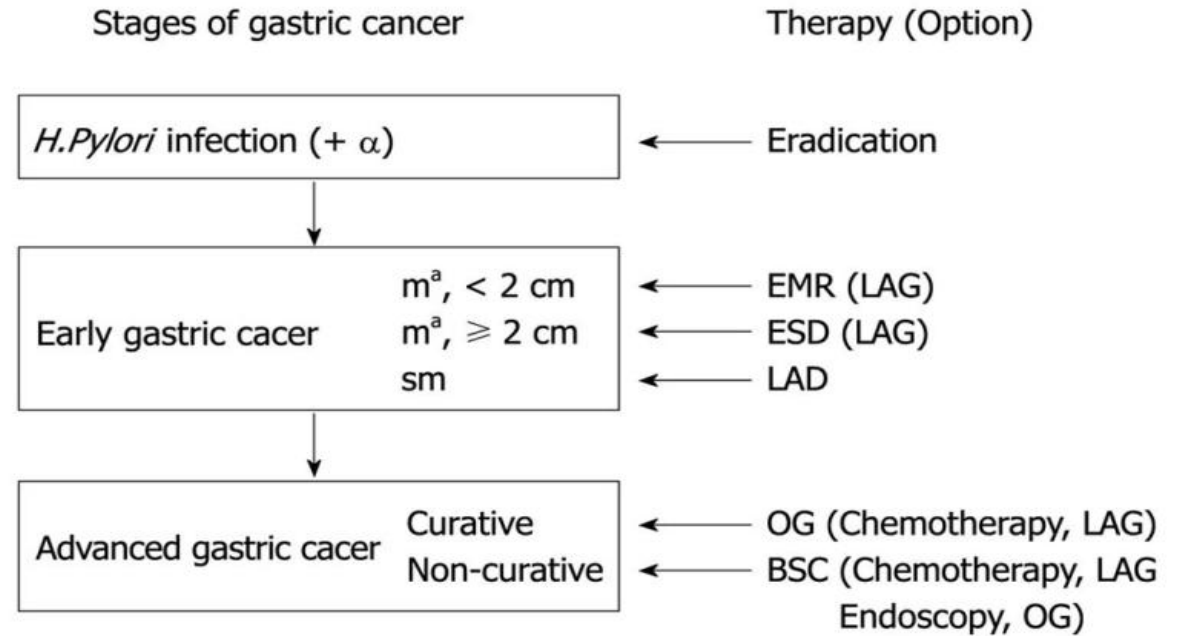
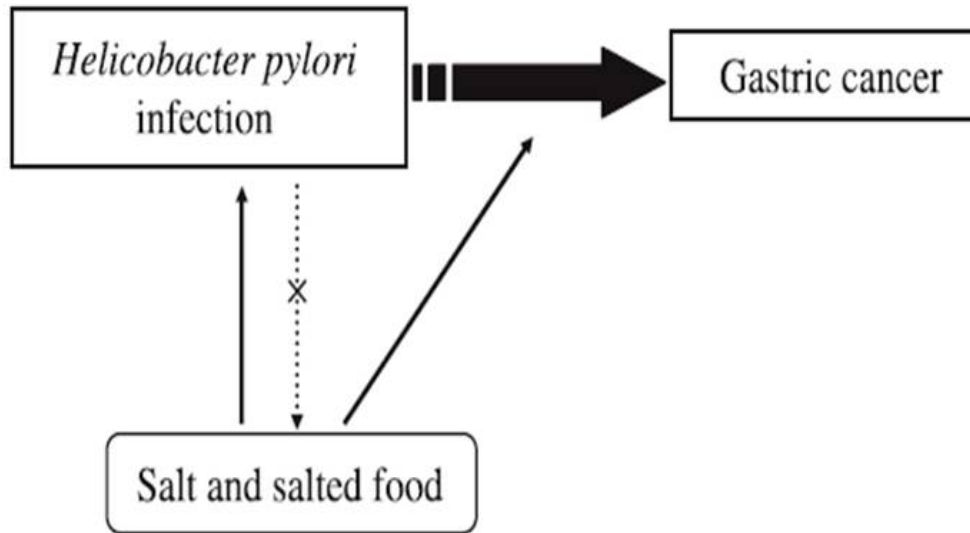
# Polyps



# Multiple Biopsy



# H. Pylori eradication





# Esophageal Cancer

- early cancers rarely present symptomatically
- Screening endoscopy
- Barrett's oesophagus and squamous dysplasia are diagnosed by endoscopy and biopsy
- Cytological screening techniques - early detection of SCC

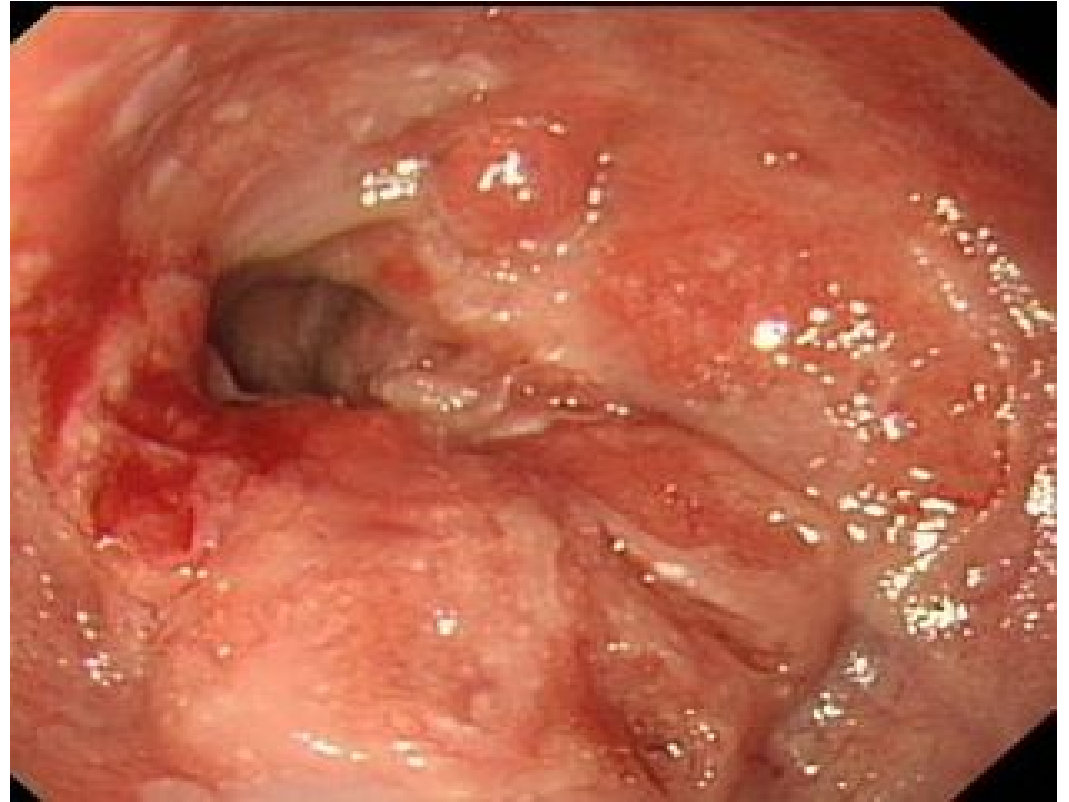
# Risk factors

- Tobacco use
- Excessive alcohol consumption;
- Obesity
- Acid/corrosive ingestion
- Gastroesophageal reflux disease ([GERD](#))
- Barret's Oesophagus

# Early Warning Signs

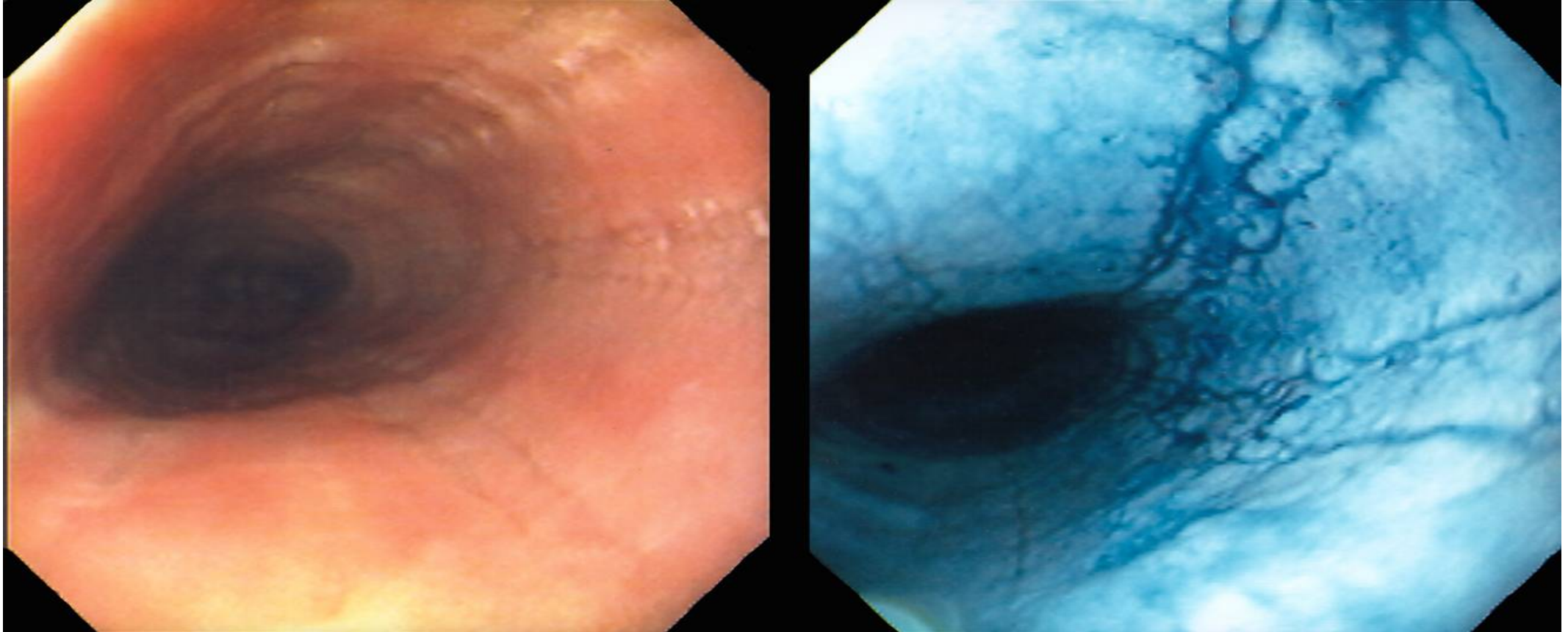
- Frequent heartburn
- Difficulty swallowing
- Bleeding in vomit
- Weight loss
- loss of appetite
- Hoarseness
- Persistent Cough

# White-light endoscopy can identify macroscopic features of early cancer

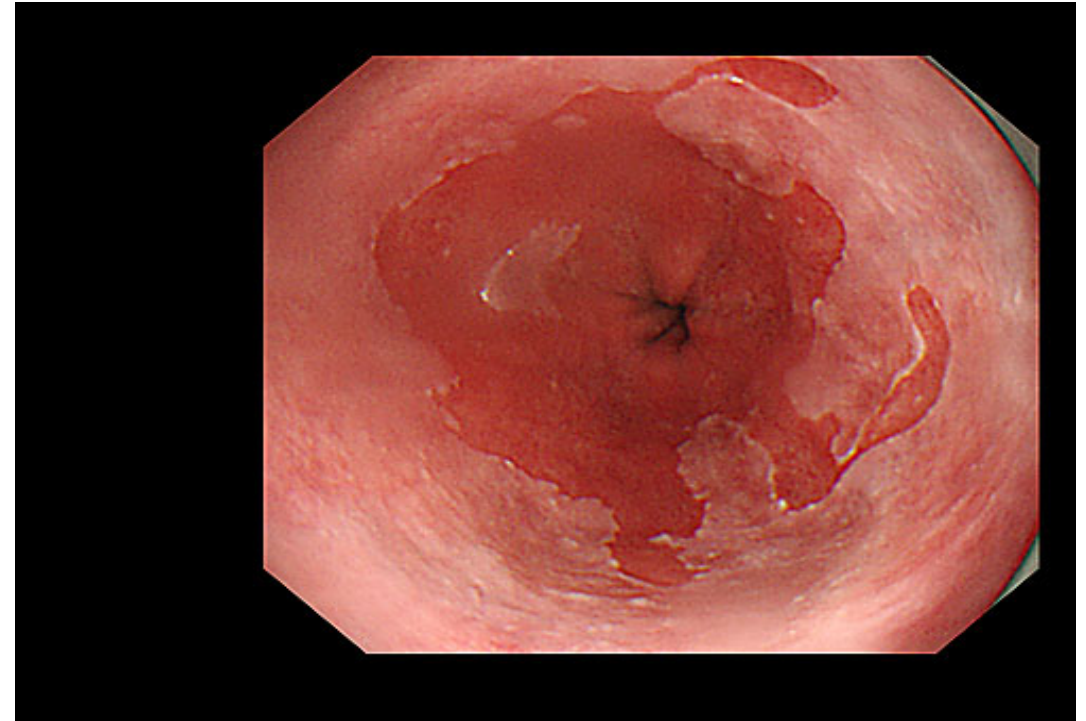
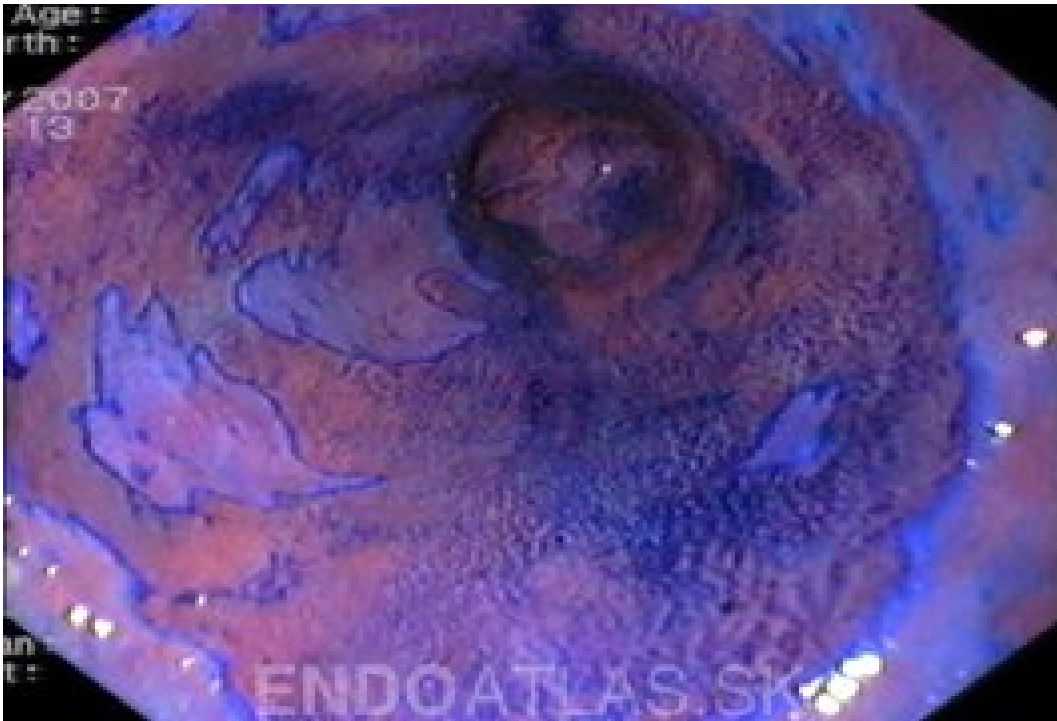


# Chromoendoscopy

## Lugol's iodine, methylene blue



# Barret's Esophagus



# Carcinoma Pancreas

## Early symptoms

- [Age > 60 yrs](#)
- [abdominal pain](#)
- [weight loss](#)
- itching,
- Obstructive jaundice

# Obstructive jaundice

- Beware - All jaundice are not viral
- Clay colored stool, Itching
- Raised direct bilirubin
- Raised ALP and GGT > 3 times normal



# USG Abdomen

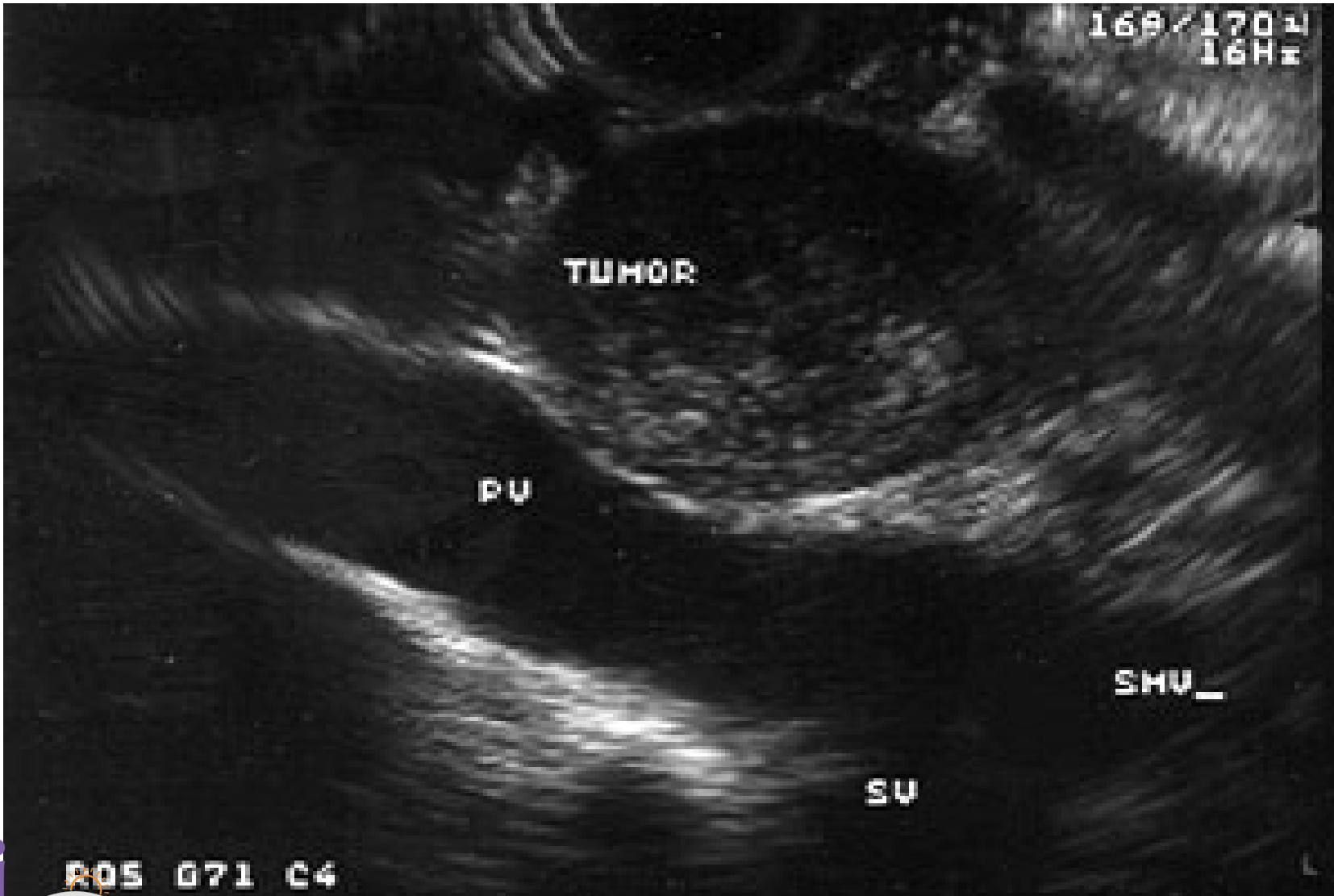
- **First investigation** of choice
- It can detect
  - Dilated portal vein
  - IHBR dilatation
  - Periapillary mass lesion
  - CBD stones

# Computed tomography (CT) scans,

- Another imaging test that can show some types of suspicious lesions. high-resolution 256-slice CT imaging, produces better, more detailed diagnostic images.

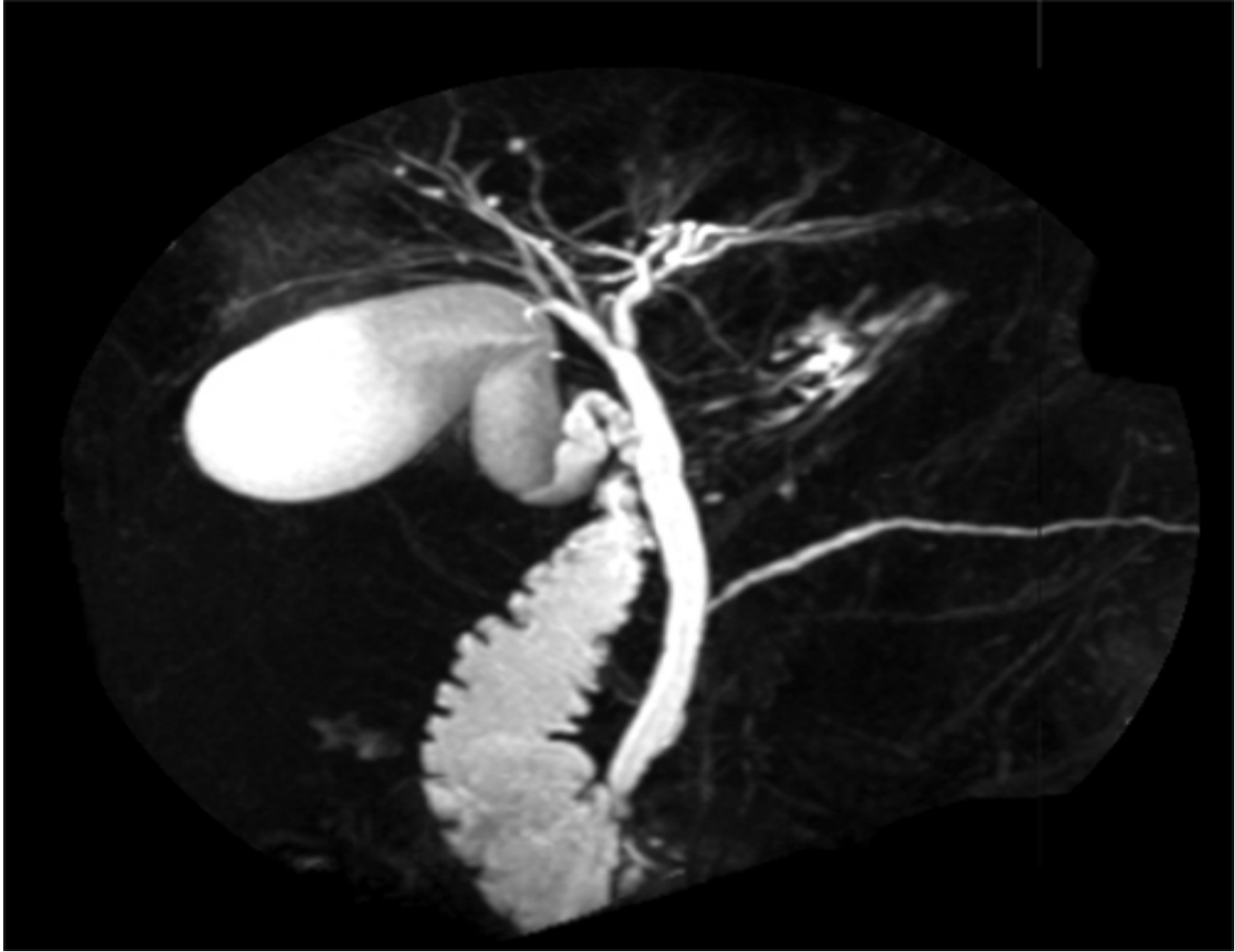
# Endoscopic ultrasound (EUS),

- a minimally invasive imaging test that uses an endoscope to evaluate the pancreas for lesions or early cancers. If suspicious lesions are present, tissue biopsies during the same procedure.



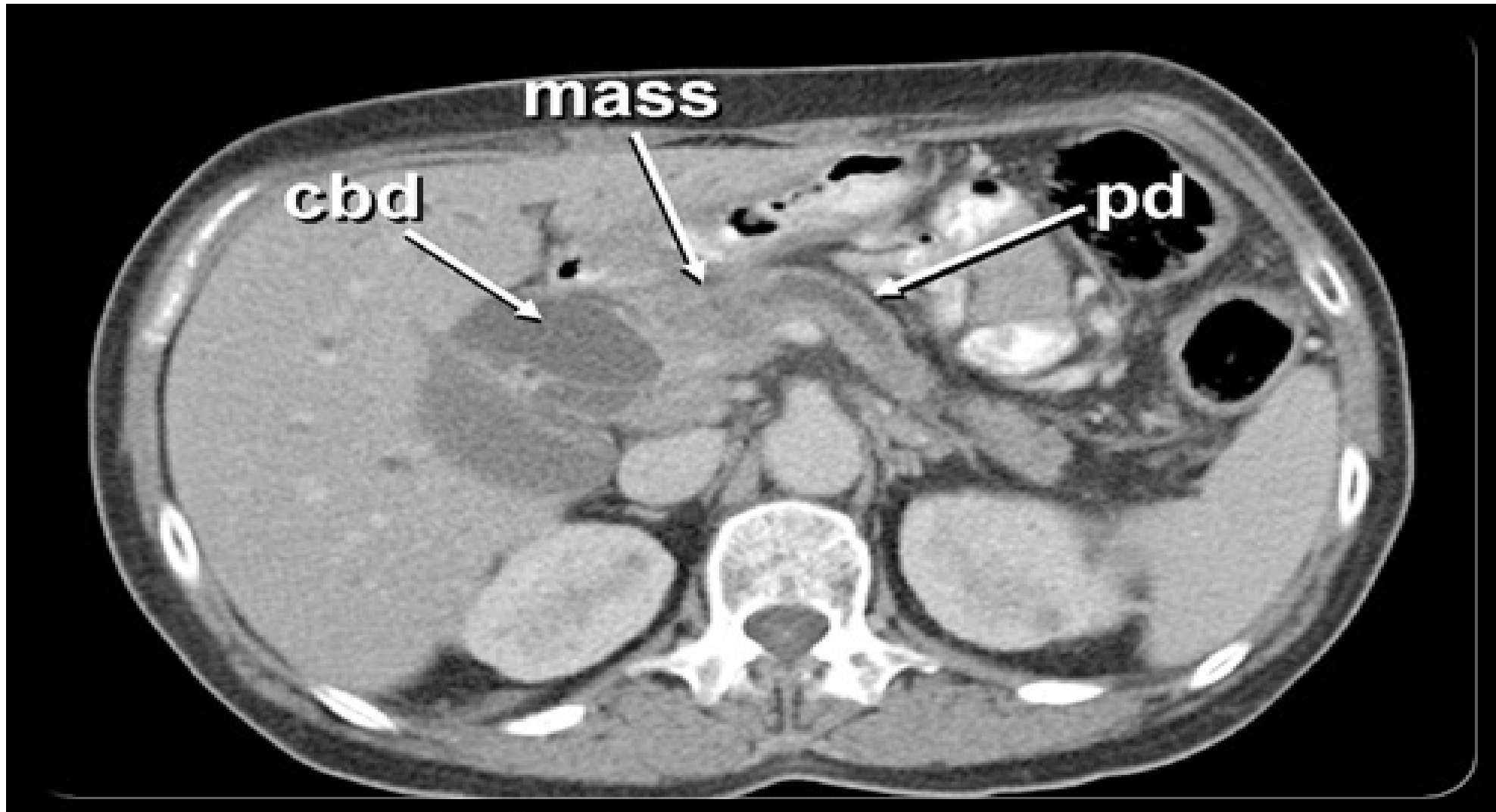
# Magnetic resonance cholangiopancreatography (MRCP)

- A type of magnetic resonance imaging (MRI) test that focuses on the pancreas and bile duct.



# Endoscopic retrograde cholangiopancreatography (ERCP)

- a test that combines the use of endoscopes and X-rays to visualize the pancreas and biliary tree. Biopsies can also be performed during ERCP.



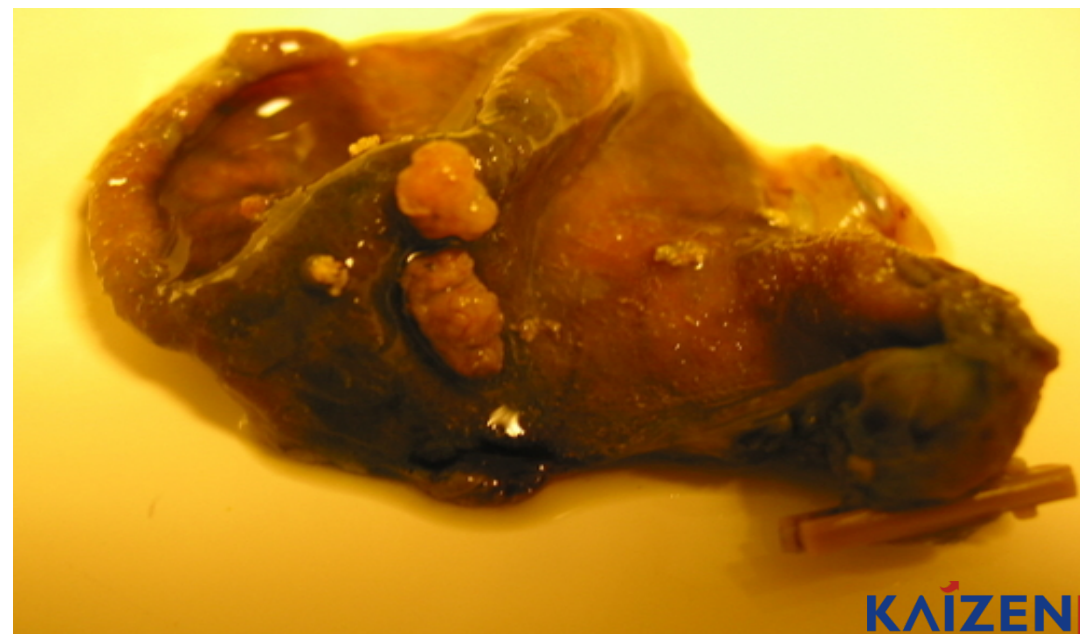


# Carcinoma Gall Bladder

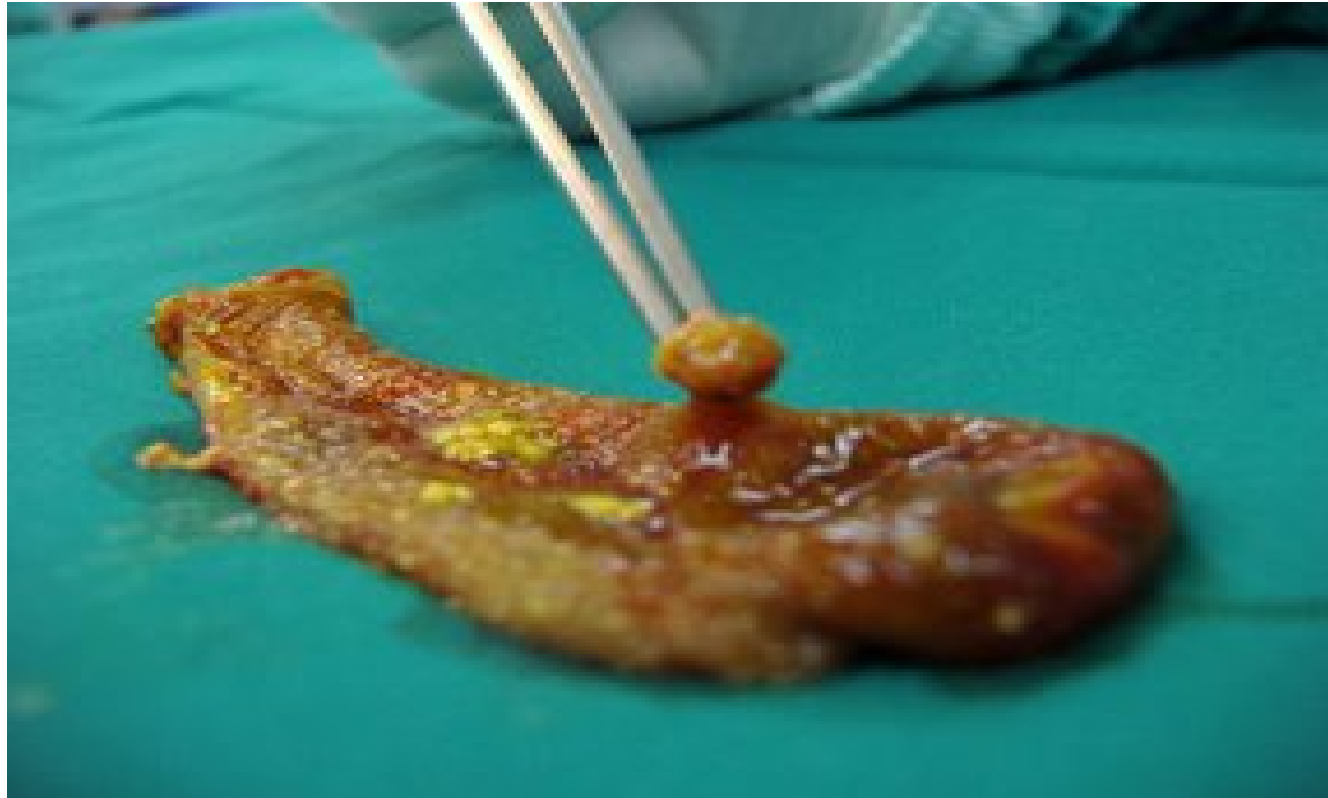
- Most cases diagnosed late – dismal prognosis
- 90 % associated with gall Stone.



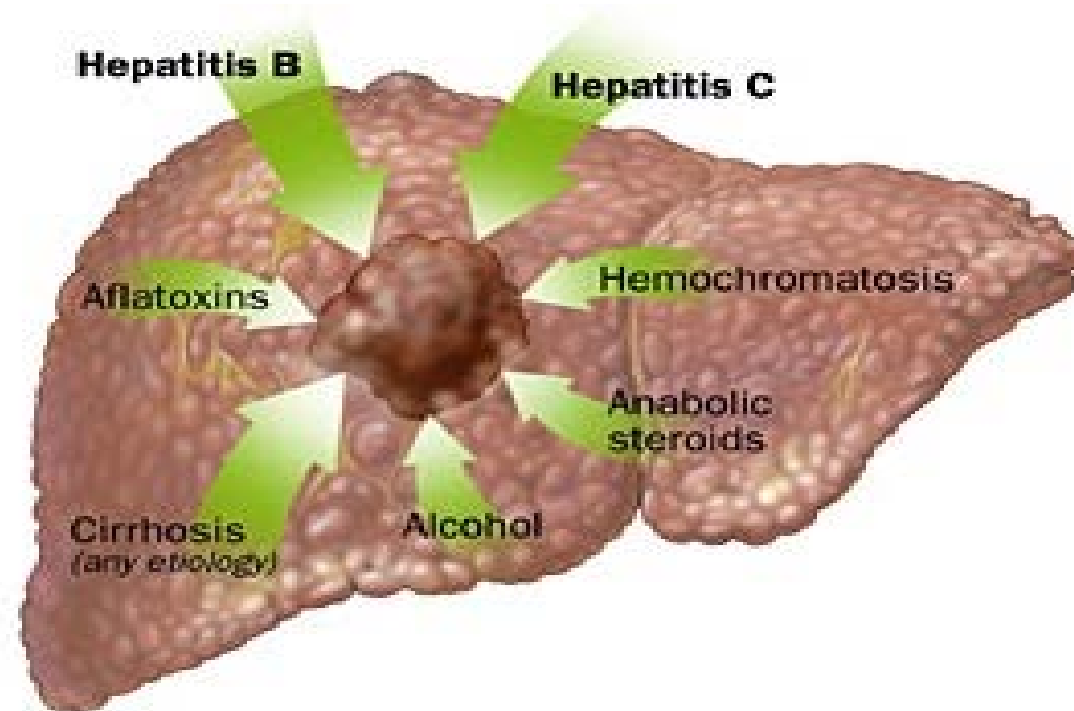
- Beware of Gall Bladder polyp
- High risk of carcinoma



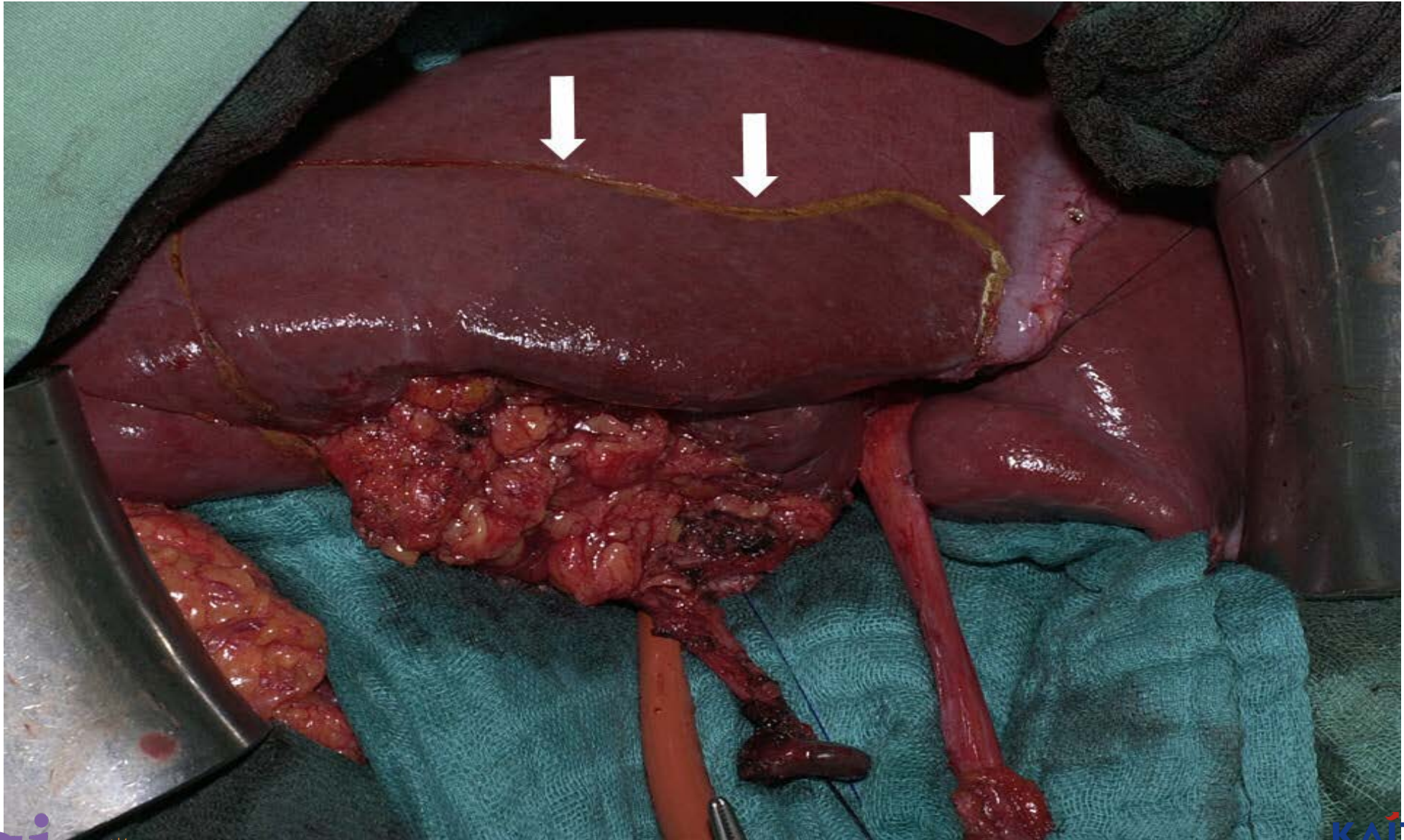
- Always examine Gall bladder Specimen
  - Biopsy is must



# Hepatocellular Carcinoma







- AFP > 500 ng/ml diagnostic
- USG – liver mass /nodule
- Triple phase CT scan is confirmatory

# Take Home Message

- G.I cancer can be diagnosed early
- Require cautious examination and investigation at the first visit itself.
- Close cooperation between General Practitioners and Specialist.
- Imaging and biopsy are must
- Early detection offers chance of cure.

# Thank You